

# Schedule of Accreditation

issued by

## United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK



0425

Accredited to  
ISO/IEC 17025:2005

### Repair & Calibration Limited Trading as RCL

Issue No: 024

Issue date: 16 November 2016

Unit 1  
Weighbridge Row  
Cardiff Road  
Reading  
Berkshire  
RG1 8LX

Contact: Mr J Lee  
Tel: +44 (0)118 958 8391  
Fax: +44 (0)118 959 2189  
E-Mail: jon\_lee@rcl-uk.com  
Website: www.rcl-uk.com

Calibration performed at the above address only

#### DETAIL OF ACCREDITATION

| Measured Quantity<br>Instrument or Gauge | Range  | Calibration and<br>Measurement Capability<br>(CMC) Expressed as an<br>Expanded Uncertainty<br>( $k = 2$ )  | Remarks |
|--|--|--|---------|
| DC VOLTAGE                               |  |  |         |
| Generation                               | 0 mV to 100 mV<br>100 mV to 10 V<br>10 V to 100 V<br>100 V to 1 kV<br>1 kV to 10 kV  | 20 ppm + 2.0 $\mu$ V<br>20 ppm + 2.0 $\mu$ V<br>20 ppm<br>20 ppm<br>0.040 %  |         |
| Measurement                              | 0 mV to 100 mV<br>100 mV to 1 V<br>1 V to 10 V<br>10 V to 100 V<br>100 V to 1 kV<br>1 kV to 10 kV<br>1 kV to 10 kV   | 15 ppm + 110.0 nV<br>12 ppm + 0.5 $\mu$ V<br>12 ppm + 60 $\mu$ V<br>20 ppm + 0.60 mV<br>16 ppm<br>0.040 % (At 1.0 V output)<br>0.070 % (At 10.0 V output)    |         |
| DC RESISTANCE                            |  |  |         |
| Generation                               | 10 $\Omega$<br>100 $\Omega$<br>1 k $\Omega$<br>10 k $\Omega$<br>100 k $\Omega$<br>1 M $\Omega$<br>10 M $\Omega$<br>100 M $\Omega$  | 60 ppm<br>25 ppm<br>25 ppm<br>25 ppm<br>35 ppm<br>65 ppm<br>120 ppm<br>500 ppm   |         |
| Measurement                              | 0 $\Omega$ to 10 $\Omega$<br>10 $\Omega$ to 100 $\Omega$<br>100 $\Omega$ to 1 k $\Omega$<br>1 k $\Omega$ to 10 k $\Omega$<br>10 k $\Omega$ to 100 k $\Omega$<br>100 k $\Omega$ to 1 M $\Omega$<br>1 M $\Omega$ to 10 M $\Omega$<br>10 M $\Omega$ to 100 M $\Omega$ | 120 ppm + 4.0 m $\Omega$<br>27 ppm + 6.0 m $\Omega$<br>18 ppm + 1 m $\Omega$<br>17 ppm + 1 $\Omega$<br>13 ppm + 0.60 $\Omega$<br>27 ppm<br>75 ppm<br>180 ppm |         |



0425  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
2 Pine Trees , Chertsey Lane, Staines-upon-Thames , TW18 3HR, UK

**Repair & Calibration Limited**  
**Trading as RCL**  
Issue No: 024 Issue date: 16 November 2016

Calibration performed at main address only

| Measured Quantity<br>Instrument or Gauge | Range  | Calibration and<br>Measurement Capability<br>(CMC) Expressed as an<br>Expanded Uncertainty<br>( $k = 2$ )                     | Remarks |
|--|--|---|---------|
| <b>DC CURRENT</b>                        |  |   |         |
| Generation                               | 100 $\mu$ A to 1 mA<br>1 mA to 10 mA<br>10 mA to 100 mA<br>100 mA to 1 A<br>1 A to 10 A  | 120 ppm + 20 nA<br>120 ppm + 0.20 $\mu$ A<br>120 ppm + 2.0 $\mu$ A<br>250 ppm + 40 $\mu$ A<br>750 ppm + 0.20 mA               |         |
| Measurement                              | 100 $\mu$ A<br>100 $\mu$ A to 1 mA<br>1 mA to 10 mA<br>10 mA to 100 mA<br>100 mA to 1 A<br>1 A to 10 A                                 | 132 ppm + 10 nA<br>66 ppm + 10 nA<br>65 ppm + 5.0 $\mu$ A<br>100 ppm + 5.0 $\mu$ A<br>180 ppm + 12 $\mu$ A<br>0.20 % + 8.0 mA |         |
| <b>AC VOLTAGE</b>                        |  |   |         |
| Generation                               | 30 Hz to 30 kHz<br>100 mV to 10 V<br>10 V to 100 V<br><br>45 Hz to 30 kHz<br>100 V to 1 kV   | 0.040 % + 30 $\mu$ V<br>0.025 % + 8.0 mV<br><br>0.050 % + 50 mV   |         |
| Measurement                              | 10 Hz to 20 kHz<br>10 mV to 100 mV<br>100 mV to 1 V<br>1 V to 10 V<br><br>45 Hz to 20 kHz<br>10 V to 100 V<br>100 V to 1 kV            | 0.080 % + 40 $\mu$ V<br>0.080 % + 0.30 mV<br>0.080 % + 3.0 mV<br><br>0.080 % + 30 mV<br>0.10 % + 230 mV                       |         |
| <b>AC CURRENT</b>                        |  |   |         |
| Generation                               | 45 Hz to 1 kHz<br>100 $\mu$ A to 100 mA<br>100 mA to 1 A<br>1 A to 10 A  | 0.060 % + 20 $\mu$ A<br>0.075 % + 0.20 mA<br>0.25 % + 3.0 mA  |         |
| Measurement                              | 45 Hz to 5 kHz<br>10 $\mu$ A to 100 $\mu$ A<br>100 $\mu$ A to 1 mA<br>1 mA to 10 mA<br>10 mA to 100 mA<br>100 mA to 1 A<br>1 A to 10 A | 0.18 % + 60 nA<br>0.12 % + 0.40 $\mu$ A<br>0.180 % + 6.0 $\mu$ A<br>0.12 % + 40 $\mu$ A<br>0.12 % + 0.4 mA<br>0.18 % + 6.0 mA |         |



0425  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
2 Pine Trees , Chertsey Lane, Staines-upon-Thames , TW18 3HR, UK

**Repair & Calibration Limited**  
**Trading as RCL**  
Issue No: 024 Issue date: 16 November 2016

Calibration performed at main address only

| Measured Quantity<br>Instrument or Gauge                   | Range  | Calibration and<br>Measurement Capability<br>(CMC) Expressed as an<br>Expanded Uncertainty<br>(k = 2)                          | Remarks   |
|--|--|--|---|
| FREQUENCY<br>Generation and Measurement<br>Specific Values | 0.1 MHz, 1 MHz, 5 MHz and<br>10 MHz  | 2.0 in 10 <sup>9</sup>   | May be also expressed as 1/f for<br>periodic time of repetitive events  |
| Other Values   | 10 Hz to 100 Hz<br>100 Hz to 1 kHz<br>1 kHz to 10 kHz<br>10 kHz to 100 kHz<br>100 kHz to 160 MHz | 1.0 in 10 <sup>6</sup><br>1.0 in 10 <sup>7</sup><br>1.2 in 10 <sup>8</sup><br>3.3 in 10 <sup>9</sup><br>3.1 in 10 <sup>9</sup> |   |
| Oscilloscopes<br>Time Interval                             | 2 ns to 1 s  | 0.02%  | Expressed in terms of the<br>frequency at which the - 3dB<br>point is obtained, with respect<br>to a low frequency reference<br>point |
| Vertical Deflection  | 1.0 mV to 300.0 mV<br>300.0 mV to 190 V  | 0.50 %<br>0.30 %   |   |
| BANDWIDTH  | For input voltages in the range<br>10 mV p-p to 5 V p-p<br><br>10 MHz to 400 MHz                 | 3.0 %  |   |
| END  |  |  |   |